

Should you go by the 5-second rule?

By Akron Beacon Journal, adapted by Newsela staff

Apr. 08, 2014 4:00 AM



Tyler, 7, (left) and Logan, 5, have lunch with mom Cindy Waddell at a Chick-Fil-A on April 3, 2013.

Have you ever heard of the five-second rule? It's an old belief about dropping food on the floor and having five seconds to pick it up. The rule says that if you wait longer than five seconds then you shouldn't eat it. If you do, you might get sick.

Not long ago scientists in England tested the rule. They say they found some truth to it.

Students there worked with professor Anthony Hilton. They dropped toast, pasta, cookies and sticky candy on the floor. Then they left the food on the floor for three to 30 seconds.

The students then checked for two common bacteria. Their names are E.coli and staph.

Students watched how these bacteria moved from the floor to the food they'd left there.

Normally bacteria cannot be seen by the human eye. You need a microscope to see bacteria.

Two Different Findings

Bacteria is so tiny that millions of it would fit onto the head of the eraser of a pencil.

There are good bacteria and bad bacteria. Yogurt has good bacteria in it. Humans have bacteria in their guts to help break down food. All bacteria feed off what they live within.

Bacteria can live in the human body. Bad bacteria can cause infections in the body like a sore throat and tooth cavities.

But the study in England found that bacteria had a hard time getting to food on the ground.

The type of ground surface matters. The study found that bacteria were most likely to transfer from tile floors to food. The study also found that bacteria were least likely to spread from carpet to food.

But don't go picking fallen Fritos out of the rug just yet.

Scientists at Clemson University in South Carolina also tested what happens to food on the floor. They found the opposite of the British study. They discovered that the five-second rule shouldn't always be trusted.

The scientists in South Carolina studied the bacteria Salmonella. They tested how fast that bacteria got from floors onto bologna and bread.

The scientists discovered that it happened instantly.

Not A Good Idea

The British study hasn't been published. That makes it impossible for other scientists to repeat the study. By repeating a study, scientists can see if the results were right or wrong.

Jeffrey T. LeJeune is a food safety expert in Ohio. He says he would be very cautious about listening to the results of the British study.

LeJeune said eating food off the floor is not a good idea. It goes against almost all the advice for stopping people from getting sick from food.

Studies shows that our floors are covered with bacteria that can make us sick. Bacteria can even be found in very clean homes.

Another problem with the British study is that it didn't test Norovirus. It is a virus that causes about half of the illnesses from food, LeJeune said. Viruses are even smaller than bacteria. The flu is a type of virus. The study done in England doesn't look at how fast Norovirus gets transferred to food.

LeJeune's bottom line: Don't eat food off the floor. Ever.

LeJeune says that it may be true that fewer bacteria get transferred in five seconds than in 10 seconds. “But waiting zero seconds is far better than waiting any seconds,” he said. “I think one second is too long.”